CLAIMS

1. A bioartificial implant comprising a semipermeable barrier designed

- from one side to allow diffusion or prevent diffusion of predetermined substances/materials/molecules/cells/cell lines produced in the human body to the other opposite side of the barrier, and

- from said other opposite side to allow diffusion or prevent diffusion of predetermined substances which are the same as or different from the first mentioned substances/materials/molecules/cells/cell lines,

characterised in that the semipermeable barrier has a surface coating of a bioactive metal, such as titanium, said surface coating being permeable to allow or prevent said diffusions.

2. A bioartificial implant comprising a semipermeable barrier designed,

- from one side to allow diffusion of body cell nutrient and oxygen from a donee's body to the other opposite side of the barrier where body organ/cells from a donor are positioned, and

- from said other opposite side to allow diffusion of substances selected in advance, produced by the donor's body organ/cells,

characterised in that the semipermeable barrier has a surface coating on said one side of

a bioactive metal, such as titanium, which surface coating is permeable to allow said diffusions.

3. An implant as claimed in claim 1 or 2, characterised in that the metal is applied by an atomising process, such as sputtering or evaporation.

4. An implant as claimed in any one of claims 1-3, characterised in that it is in the form of a container.

5. An implant as claimed in any one of claims 1-4, c h a r a c t e r i s e d in that the barrier has said surface coating on both sides.

6. An implant as claimed in any one of claims 1-5, c h a r a c t e r i s e d in that the coating/coatings has/have a thickness from about 5 nm, such as about 50-250 nm.

7. Use of the implant as claimed in any one of claims 1-6 as bioartificial pancreas.

8. Use of the implant as claimed in any one of claims 1, 3-6 as part of a sensor on a measuring instrument.

9. A method for reducing the risk of formation/ growth of connective tissue in connection with an implant comprising a semipermeable barrier, c h a r a c t e r - i s e d in that the barrier is provided at least on one side with a permeable coating of bioactive metal.

10. A method as claimed in claim 9, c h a r a c - t e r i s e d in that the coating is prepared by atomising (sputtering, evaporation).